IEEE

South Sask. Section

Friday 25th October, 2019 | [1200 - 1330] Hrs.
Venue: ED 388,University of Regina, Regina Canada

Technical Talk: A Novel Data-Driven Voltage Control Approach for Grid-Connected Wind Power Plants

University of Regina | Regina, Canada

Abstract: Due to increasing penetration of wind power plants (WPPs), power grids are facing significant power quality challenges. In this presentation, a data-driven voltage control approach is proposed for a grid-connected WPP. Two regression models are developed through surface fitting using MATLAB curve fitting toolbox: one is based on simulation data to determine the required reactive power for voltage compensation; another is based on field measurement data to determine reactive power characteristics of the WPP. Two controllers, a central WPP controller and a capacitor controller, are designed, and their effectiveness is validated through case and sensitivity studies.

SPEAKER PROFILE

Dr. Xiaodong Liang received her Ph.D. degree from University of Alberta, Edmonton, Canada in 2013. She had almost 12 years industrial experience as a Principal Power Systems Engineer with Schlumberger in Edmonton from 2001 to 2013. She worked with Washington State University in USA and Memorial University of Newfoundland in Canada from 2013 to 2019 as an Assistant and later Associate Professor. She joined University of Saskatchewan in Canada in July 2019, where she is currently an Associate Professor. Dr. Liang is a Senior Member of IEEE and a Professional Engineer of Newfoundland and Labrador.

REGISTRATION LINK

Last Date to Register
23rd October, 2019

*** Pizza and Refreshment are provided**

For any query please contact:

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